IT. F. W. Loops 480th Sgdn, 336 Bomb. Gp. Avon Park, Fla. Mr. + Mrs. Charles E. Loops, Jr. 907 Chowan ave. Lynchburg. Virginia

Thursday night Leb. 18, 1943 Dear Kids -"and how the hell are you"? to use a bit of colloquilism! That's the way we usually greet one onother. - Cither that ar a bit of worked radio procedure we picked up in Lubbock, to wit: "Don't go ahead until Szay, go ahead; go ahead "!- Iknow, wire all muts, - so don't worry too much about us. Thank faut for my nice valentine. - Sue got it hanging under her ficture. - so now & can prove she's my girl friend! It certainly was an appropriate one she picked out. - your sure she did it all by herself? So Tester is in Melbourne-eh. The first day I flow in a B-26 we went over there. The I haven't even been mean the east coast of Florida since-except up facksonville way. - Yesterday we were supposed to fly formation to Raylona Beach + back. There as a WAAC comp there and we were going to bozzem so low they'd think we were coming right in - but no - we just fooled around in general and ended up by going over the camp here at about

50 feet !- Upon landing there was a mussage awaiting the flight leader from the Colonel! after the Col. get three racking the It. Tack - he told him - which it wasn't to be done again - it did look nighty fretty! He have regular combat missions now. He make cross countries, drof bombs, and sometimes go out over the Sulf for target practice with the machine guns. You should see the old shells recochet up off the water. Course you can only see the incendiary ones - but I mean they scat! It's lots more fun when you have deflinite missions instead of just flying around. La guess you knew That been transferred the 480th Sach. Twas sent up there as a cohild-with the assurance Rid be checked out with a plane of my own either before I lift this country or immediately whom getting to the battle zone. - Today I was transferred again to another crew. and Son glad. This friend of mino - a lot It. this is my first pilot. He graduated in 1941- and has about 1500 hrs. He has been an instructor, flown gliders, - and Louglas D.C. 3's along with Lockheds. - He came mi here and checked out on the B-26 faster than anyone else even has at this field! I feel quite howard that he should have asked for me to be his cohilot. He will check me out and

the huits + tricks I can pick up three his experiences will be irreplaceable, - if you know what Isneau. The onlything about being with It. Buchertis his eageness for combat. Boy, if Istay with him. It see combat duty twice as fast as Swould other wise. But as I have no other choice, anyhour Tid much rather be going into it with hims his experience than with one of our own group with no more experience than ?! And I'd no longer been assigned to his crew when the fire - worked blew up! - Storit tell the folks this - cause theris no need to worsy them until everything is definite - but. - today we were "alerted! That means one of two things - we are wither to go topedo school to and the for awhile and then account. of course-everything could be changed & called off over-night- that - - - well, - in the army we fast learn never to cases our bridges until we come to it - so for this reason if no other; there's no use worrying the folks wantil the time comes - so please don't mentionist to them in assay It's two bad you folks don't live in Shewille augmore. - I Juite a few folks make trips up then from hue - right now we are working up one to D.C. or Phila. - The only rut is that we probably wouldn't be able to stay but a few hours

before coming back to Florida. I've been saving mag agines with pictures
of different planes the flown - The other night of
cut en out. - Sout know what but thought you might like to have 'em. - The list the ones I had of primary and Basic - but here are the AT 9's and AT 17's (also known in any circles as C-78'p) and the B-26's. Start a fire with ene when you finish or you might sendem home! Gotta stop now- Ir let me hear from you and mums the word .-P.S.-Heris am old Cadet visignia I had saved thinking Janet might like it. - Hly, - is beyond me!



HANDLEBARS attached to a .50 caliber antiaircraft machine gun make firing the weapon seem much like riding a bucking motorcycle at high speed over a bumpy road. The photograph at the right, taken on a patrol vessel somewhere on the Pacific, shows a steel-helmeted Coast Guardsman in action.

As compared with aiming by a shoulder rest, the handlebar grip is said to be less fatiguing to the gunner, since the bars absorb some of the vibration of the gun. It also allows better leverage and freer sweep for following fast-moving planes across the sky.

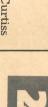
The trigger mechanism is operated by means of a squeeze grip on one of the handles, just as the throttle of a motorcycle is controlled by one of the rider's hands



#### RECOGNITION POINTS

- A. Low wing with slight dihedral, Curtiss filets, marked taper on leading edge.
- B. Underslung nacelles with radial cowlings extending forward to fuselage line.
- C. Fore section of fuselage very broad, short nose parallels engine nacelles.
- D. Single tail with large swept-back fin, small elliptical rudder, equi-taper on tailplane leading and trailing edges.

### NACELLES PARALLEL NOSE



#### CURTISS AT-9

Developed specifically for the training of potential multi-engine pilots and co-pilots, this is the most secret of all transitional trainers now being produced in quantity for the Army. Powered by two 280 hp Lycoming engines, it has sufficient speed, ruggedness, and instrument complexity to simulate combat characteristics of American bombers. A two-place design, with side-by-side seating, it has provision for two additional seats for specific training purposes.







## 4 BEECH AT-11

Generally similar in appearance to the AT-7 and commercial Beech Model 18S, this plane is distinguished by changes in nose and inclusion of turret for training of bombardiers and aerial gunners. Powered by two 450 hp Pratt & Whitney Wasp engines, it has speed estimated at slightly over 200 mph, depending on training load. It is 34 feet, 3 inches long, 9 feet, 5 inches high, and has a wing span of 47 feet, 8 inches. It carries a crew of three or four.

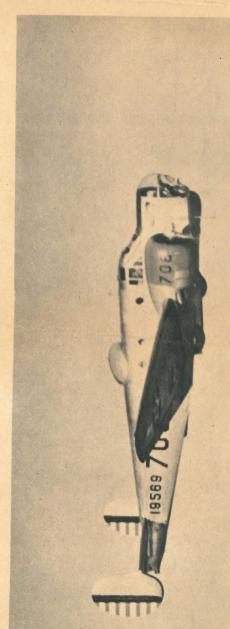
#### RECOGNITION POINTS

- A. Low wing with marked dihedral, equitable taper leading and trailing edges, round tins
- B. Inset nacelles, radial cowlings, concave taper on nacelle top, bottom, and sides.
  - taper on nacelle top, bottom, and sides.

    C. Fuselage tapers sharply to tail on bottom.

    Transparent turret above wing trailing edge.
    - D. Twin tail with high vertical surfaces, swept-back fin, rounded rudders, straight trailing edge on tailplane.

TURRET ABOVE TRAILING EDGE



#### RECOGNITION POINTS

- A. Low wing, slight dihedral, marked taper on trailing edge, slight taper leading edge.
- B. Underslung racelles, no taper on sides, radial cowlings.
- C. Cigar-shaped fuselage, equal taper on top and bottom.
- D. High single tail, elliptical fin and overhanging rudder, tapered stabilizers, straight elevator trailing edge.

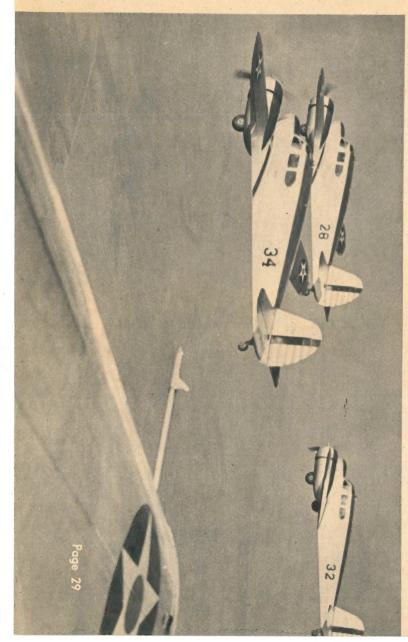




#### CESSNA AT-17

Closely resembling the AT-8 and developed from the same prototype, the commercial T-50, this plane is used only by the U. S. Operational changes to suit different training purpose and a change in engine give it slightly different performance characteristics. It has an initial rate of climb of 1,525 feet per minute, cruising speed of 195 mph at 7,500 feet, lands at 55 mph with flaps. A five-place ship with dual controls sideby-side, it is used for navigation training.







# FAIRCHILD AT-13

The ultimate in plane designs using a minimum of strategic materials, this twinengine trainer, which debuted several months ago, was made possible by the Duramold process. It is the largest all-wood plane to enter Army service, measuring 37 feet, 7% inches in length, 13 feet in height, with a wing span of 52 feet, 6 inches. An all-purpose crew trainer, it has accommodations for pilot and co-pilot in the cockpit, bombardier in the nose, radio man, turret gunner.

#### RECOGNITION POINTS

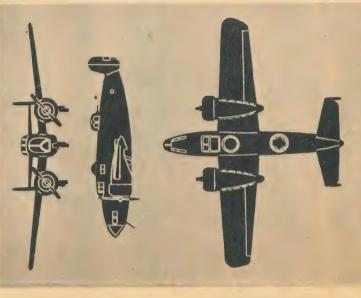
- A. Mid wing with marked dihedral set far back, equal taper leading and trailing
- B. Underslung nacelles, radial cowlings, nacelles extend beyond wing trailing edge.
- C. Long fuselage with little taper, navigation hatch, top turret aft of wing trailing edge.

  D. Small twin tail, slight taper on fin and

#### MIDWING FAR BACK

rudder, high tailplane position.







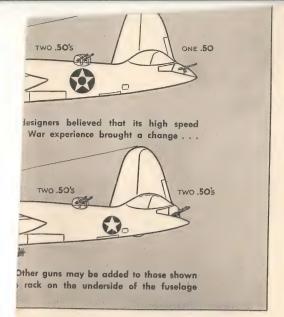
making, however, is the ability of these operatives to keep working long hours, day after day, without loss of efficiency. Inten-



Don't perch on t end of a chair a slumped, knokneed fashion, deep, with ba bone against ch

> Believe it one of the ways to tired mu to exerci in a spee





POPULAR SCIENCE



In its specifications for the B-26, the Army seemed to ask for the impossible—and got it. Defying most of the orthodox ideas of warplane design, the Marauder was one of the longest chances in aircraft building







The Phantom, 91-foot model of a radio-controlled concrete convoy vessel proposed as an answer to the Ushoats. The cabin is a temporary structure for the crew of two that took her to Washington for tests



tion against the enemy fighter opposition.

The bid for an airplane of this type went out to the nation's manufacturers.

went out to the nation's manufacturers. The Glenn L. Martin Company in Baltimore took the proposition under consideration and asked the engineering staff to submit proposals in the form of three-view drawings. Several sets of sketches were sent in. They were set up for study and disccussion before the entire staff. Then iron-haired, steel-eyed Glenn L. Martin walked in, surveyed the half-dozen proposals and, after a couple of minutes, pointed to one. "That's it!" He picked out a proposal set forward by the brilliant nonconformist, Peyton Magruder.

Some of the engineers who studied the Army's demands had asked, "When do they want this miracle passed?" The general opinion, at first, was that the Army was asking for the impossible. That was all that was needed. It seems that the Army's current motto, "The difficult performed immediately, the impossible takes a little longer," started with Magruder and the

specialists who worked with him.

Most men would have gone about picking
up where their predecessors left off. Ma-

in a ship that size, then defied the structures men to design for his theory.

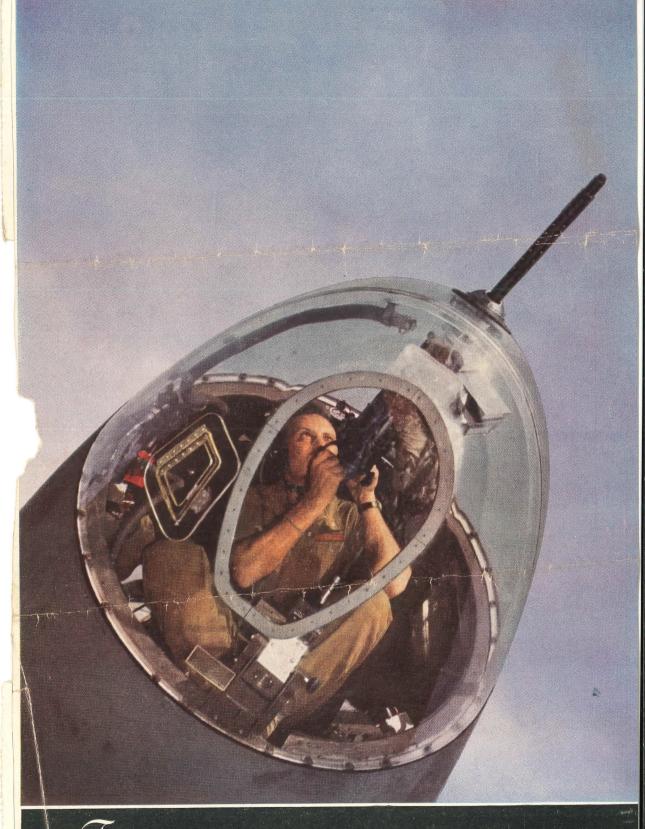
For three weeks the project engineers lived within the limits of the Martin plant near Baltimore, driving a drafting crew to the verge of collapse as events in Europe showed more and more the desperate need for this kind of airplane—a ship that could fly like a racer, maneuver like a fighter, and lift a truck's load.

The proposed bomber was exactly what most people thought Magruder would trot out. Short-spanned, high-winged and deepbellied, a closed-course racer built big, packed with the latest radical ideas on airplane design.

There was no fussing about peacetime production frippery. The first B-26 that came off the line was the pilot model and full-scale prototype in one. Behind it stretched a production line. The B-26 represented the longest chance ever taken on a single design.

The first Marauder appeared in November 1940. It had a span of 65 feet, was 58'3" long, and was powered by two 1,850-h.p. Pratt & Whitney Wasp engines. Its top speed was above 350 m.p.h. The prototype,





ROM the big transparent nose of the Martin Marauder, the bombardier aims the .50 caliber machine gun that guards the bomber from head-on attack. (Kodachrome by Hans Groenhoff)